

**AMENDMENTS TO THE CLAIMS**

The following Listing of the Claims will replace all prior versions and all prior listings of the claims in the present application:

**Listing of the Claims:**

1-111. (Cancelled)

112. (Previously Presented) A composition comprising:

demineralized bone matrix in a hydrogel carrier,  
wherein the hydrogel carrier comprises a macromer having poly(ethylene glycol) moieties, trimethylene carbonate moieties, lactic acid ester moieties and acrylic ester moieties.

113. (Previously Presented) The composition of claim 112 wherein the composition is in a form of an aqueous mixture.

114. (Previously Presented) The composition of claim 112 further comprising a photo initiator.

115. (Previously Presented) The composition of claim 114 wherein the photo initiator is Eosin Y.

116. (Previously Presented) The composition of claim 112 wherein the hydrogel carrier further comprises a free radical generating combination of a transition metal, a peroxide, and a stabilizing agent.

117. (Previously Presented) The composition of claim 112 further comprising an additive to modify at least one of a physical and a chemical aspect of the composition.

118. (Previously Presented) The composition of claim 112 further comprising an additive to modify a biological aspect of the composition.

119 (Previously Presented) The composition of claim 112 further comprising cortical-cancellous bone chips.

120. (Previously Presented) The composition of claim 112 wherein the composition is in a form of a dry product.

121. (Previously Presented) The composition of claim 112 wherein the composition is polymerized into a pre-selected shape.

122. (Withdrawn) A method of manufacturing a composition comprising:  
mixing demineralized bone matrix in a hydrogel carrier,

wherein the hydrogel carrier comprise a macromer having poly(ethylene glycol) moieties, trimethylene carbonate moieties, lactic acid ester moieties and acrylic ester moieties.

123. (Withdrawn) The method of claim 122 wherein the composition is in a form of an aqueous mixture.

124. (Withdrawn) The method of claim 122 further comprising mixing a photo initiator in the hydrogel carrier.

125. (Withdrawn) The method of claim 124 wherein the photo initiator is Eosin Y.

126. (Withdrawn) The method of claim 122 wherein the hydrogel carrier further comprises a free radical generating combination of a transition metal, a peroxide, and a stabilizing agent.

127. (Withdrawn) The method of claim 122 further comprising mixing an additive to modify at least one of a physical and a chemical aspect of the composition.

128. (Withdrawn) The method of claim 122 further comprising mixing an additive to modify a biological aspect of the composition.

129. (Withdrawn) The method of claim 122 further comprising mixing cortical-cancellous bone chips in the hydrogel carrier.

130. (Withdrawn) A composition comprising:

demineralized bone matrix in a hydrogel carrier,

wherein the hydrogel carrier comprises a macromer having poly(ethylene glycol) moieties, trimethylene carbonate moieties, lactic acid ester moieties and acrylic ester moieties, and wherein a weight of the demineralized bone matrix is about 20% of the composition by weight.

131. (Withdrawn) The composition of claim 130 wherein the composition is in a form of an aqueous mixture.

132. (Withdrawn) The composition of claim 130 further comprising a photo initiator.

133. (Withdrawn) The composition of claim 132 wherein the photo initiator is Eosin Y.

134. (Withdrawn) The composition of claim 130 wherein the hydrogel carrier further comprises a free radical generating combination of a transition metal, a peroxide, and a stabilizing agent.

135. (Withdrawn) The composition of claim 130 further comprising an additive to modify at least

one of a physical and a chemical aspect of the composition.

136. (Withdrawn) The composition of claim 130 further comprising an additive to modify a biological aspect of the composition.

137. (Withdrawn) The composition of claim 130 further comprising cortical-cancellous bone chips.

138. (Withdrawn) The composition of claim 130 wherein the composition is in a form of a dry product.

139. (Withdrawn) The composition of claim 130 wherein the composition is polymerized into a pre-selected shape.

140. (Withdrawn) A method of manufacturing a composition comprising:

mixing demineralized bone matrix in a hydrogel carrier,

wherein the hydrogel carrier comprise a macromer having poly(ethylene glycol) moieties, trimethylene carbonate moieties, lactic acid ester moieties and acrylic ester moieties, and wherein a weight of the demineralized bone matrix is about 20% of the composition by weight.

141. (Withdrawn) The method of claim 140 wherein the composition is in a form of an aqueous mixture.

142. (Withdrawn) The method of claim 140 further comprising mixing a photo initiator in the hydrogel carrier.

143. (Withdrawn) The method of claim 142 wherein the photo initiator is Eosin Y.

144. (Withdrawn) The method of claim 140 wherein the hydrogel carrier further comprises a free radical generating combination of a transition metal, a peroxide, and a stabilizing agent.

145. (Withdrawn) The method of claim 140 further comprising mixing an additive to modify at least one of a physical and a chemical aspect of the composition.

146. (Withdrawn) The method of claim 140 further comprising mixing an additive to modify a biological aspect of the composition.

147. (Withdrawn) The method of claim 140 further comprising mixing cortical-cancellous bone chips in the hydrogel carrier.

148. (Withdrawn) A composition comprising:

demineralized bone matrix in a hydrogel carrier,

wherein the hydrogel carrier comprises a macromer having poly(ethylene glycol) moieties, trimethylene carbonate moieties, lactic acid ester moieties and acrylic ester moieties, and wherein a weight of the demineralized bone matrix is about 30% of the composition by weight.

149. (Withdrawn) The composition of claim 148 wherein the composition is in a form of an aqueous mixture.

150. (Withdrawn) The composition of claim 148 further comprising a photo initiator.

151. (Withdrawn) The composition of claim 150 wherein the photo initiator is Eosin Y.

152. (Withdrawn) The composition of claim 148 wherein the hydrogel carrier further comprises a free radical generating combination of a transition metal, a peroxide, and a stabilizing agent.

153. (Withdrawn) The composition of claim 148, further comprising an additive to modify at least one of a physical and a chemical aspect of the composition.

154. (Withdrawn) The composition of claim 148 further comprising an additive to modify a biological aspect of the composition.

155. (Withdrawn) The composition of claim 148 further comprising cortical-cancellous bone chips.

156. (Withdrawn) The composition of claim 148 wherein the composition is in a form of a dry product.

157. (Withdrawn) The composition of claim 148 wherein the composition is polymerized into a pre-selected shape.

158. (Withdrawn) A method of manufacturing a composition comprising:

mixing demineralized bone matrix in a hydrogel carrier,

wherein the hydrogel carrier comprise a macromer having poly(ethylene glycol) moieties, trimethylene carbonate moieties, lactic acid ester moieties and acrylic ester moieties, and wherein a weight of the demineralized bone matrix is about 30% of the composition by weight.

159. (Withdrawn) The method of claim 158 wherein the composition is in a form of an aqueous

mixture.

160. (Withdrawn) The method of claim 158 further comprising mixing a photo initiator in the hydrogel carrier.

161. (Withdrawn) The method of claim 160 wherein the photo initiator is Eosin Y.

162. (Withdrawn) The method of claim 158 wherein the hydrogel carrier further comprises a free radical generating combination of a transition metal, a peroxide, and a stabilizing agent.

163. (Withdrawn) The method of claim 158 further comprising mixing an additive to modify at least one of a physical and a chemical aspect of the composition.

164. (Withdrawn) The method of claim 158 further comprising mixing an additive to modify a biological aspect of the composition.

165. (Withdrawn) The method of claim 158 further comprising mixing cortical-cancellous bone chips in the hydrogel carrier.

166. (Withdrawn) A composition comprising:

demineralized bone matrix in a hydrogel carrier,

wherein the hydrogel carrier comprises a macromer having poly(ethylene glycol) moieties, trimethylene carbonate moieties, lactic acid ester moieties and acrylic ester moieties, and wherein a weight of the demineralized bone matrix is about 40% of the composition by weight.

167. (Withdrawn) The composition of claim 166 wherein the composition is in a form of an aqueous mixture.

168. (Withdrawn) The composition of claim 166 further comprising including in the composition a photo initiator.

169. (Withdrawn) The composition of claim 168 wherein the photo initiator is Eosin Y.

170. (Withdrawn) The composition of claim 166 wherein the hydrogel carrier further comprises a free radical generating combination of a transition metal, a peroxide, and a stabilizing agent.

171. (Withdrawn) The composition of claim 166 further comprising an additive to modify at least one of a physical and a chemical aspect of the composition.

172. (Withdrawn) The composition of claim 166 further comprising an additive to modify a

biological aspect of the composition.

173. (Withdrawn) The composition of claim 166 further comprising cortical-cancellous bone chips. [0115]

174. (Withdrawn) The composition of claim 166 wherein the composition is in a form of a dry product.

175. (Withdrawn) The composition of claim 166 wherein the composition is polymerized into a pre-selected shape.

176. (Withdrawn) A method of manufacturing a composition comprising:

mixing demineralized bone matrix in a hydrogel carrier,

wherein the hydrogel carrier comprise a macromer having poly(ethylene glycol) moieties, trimethylene carbonate moieties, lactic acid ester moieties and acrylic ester moieties, and wherein a weight of the demineralized bone matrix is about 40% of the composition by weight.

177. (Withdrawn) The method of claim 176 wherein the composition is in a form of an aqueous mixture.

178. (Withdrawn) The method of claim 176 further comprising mixing a photo initiator in the hydrogel carrier.

179. (Withdrawn) The method of claim 178 wherein the photo initiator is Eosin Y.

180. (Withdrawn) The method of claim 176 wherein the hydrogel carrier further comprises a free radical generating combination of a transition metal, a peroxide, and a stabilizing agent.

181. (Withdrawn) The method of claim 176 further comprising mixing an additive to modify at least one of a physical and a chemical aspect of the composition.

182. (Withdrawn) The method of claim 176 further comprising mixing an additive to modify a biological aspect of the composition.

183. (Withdrawn) The method of claim 176 further comprising mixing cortical-cancellous bone chips in the hydrogel carrier.